

REMARKS

Upon entry of the Amendment, claims 1-6 and 9-10 are all the claims pending in the application.

Claims 5-6 were previously deemed allowable.

Claims 1 and 2 are amended in response to the rejection over § 112. Specifically, the phrase “having a lower glass transition temperature than said magnesium titanate powder and” has been deleted to clarify the claims. No new matter is added.

This amendment adds no new matter, raises no new issues and places this application in immediate condition for allowance. Therefore, Applicants respectfully request that this Amendment be entered.

Claims 1 and 2 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

It is asserted that the recitation “and a glass powder having a lower glass transition temperature than said magnesium titanate powder” is considered to render the claims indefinite because it is not understood how an inorganic powder that is not a glass may have a glass transition temperature.

As written, Applicants do not intend the term “inorganic powder” to exclude a glass. In regard to the specific question posed, it may in some case be possible for composition that is not a glass at ambient conditions to have a property termed a glass transition temperature. Therefore, it is respectfully requested that the rejection be withdrawn.

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However, to advance prosecution, Applicants amend claims 1 and 2 to remove the extraneous language “having a lower glass transition temperature than said magnesium titanate powder and.” Applicants respectfully submit that the claims are clear and definite and request that the rejection be reconsidered and withdrawn.

Claims 1 and 2 are rejected under 35 U.S.C. § 112, first paragraph.

In response, Applicants respectfully traverse as follows.

In regard to the rejection under § 112, ¶ 1, the claim language inserted into the claim in the Amendment of May 20, 2003 is rejected as not described in the originally filed specification. As stated in the Remarks section of the May 20, 2003 Amendment, support is found in original claims 9 and 10. Applicants respectfully assert that one of ordinary skill at the time of invention would understand its meaning.

Claims 9 and 10 depend from claim 1, reciting a glass paste comprising a magnesium titanate powder (an inorganic powder) . . . “and a glass powder having lower glass transition temperature [than the magnesium titanate powder] . . .” Accordingly, there is support in the originally filed application for claims 1 and 2 which recite “a glass powder having a lower glass transition temperature than said magnesium titanate powder . . .” Therefore, the claims satisfy the provisions of 35 U.S.C. § 112, ¶ 1.

However, in order to further prosecution, the term “having a lower glass transition temperature than said magnesium titanate powder and” in claims 1 and 2 has been deleted by amendment. Therefore, Applicants respectfully request that the rejection be reconsidered and withdrawn.

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Claims 1-4, 9 and 10 are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Bacher.

It is argued that Bacher teaches a glass and inorganic powder mixture including magnesium titanate wherein the powder has a particle size preferably between 1 and 5 microns.

In response, Applicants traverse because Bacher discloses compositions consisting of non-conducting glasses having a softening point greater than 500°C, crystalline filler, MgTiO₃, and/or precursor crystalline oxides MgO and TiO₂ capable of forming MgTiO₃.

Applicants submit the Declaration of Tetsu Umeda, providing experimental data clearly showing that Bacher does disclose Applicants' claimed invention. To more clearly demonstrate patentability of the present invention, the Declaration of Tetsu Umeda comparatively analyzes a replicated composition of Bacher, and shows that the Bacher composition is substantially different from Applicants' claimed composition in that Bacher does not have a glass powder having a glass transition temperature of 500°C or less.

The Declaration provides experimental data showing that Bacher's glass composition consisting of 40% SiO₂, 18% BaO, 5% CaO, 6% B₂O₃, 10% Al₂O₃, 5% MgO, 8% ZnO, and 8% PbO has a glass transition temperature of 593°C, and is different from the glass powder having a glass transition temperature of 500°C or less recited as Claims 1 and 2.

Therefore, claim 1 and claims 3 and 9, which depend on claim 1, and claims 2, 4 and 10, which depend on claim 2, are not anticipated by Bacher.

Further, Bacher does not disclose Applicants' recited BET specific surface area. Applicants respectfully do not agree that it is proper in this instance to place the burden on Applicants to prove that Bacher does not disclose a recitation of Applicants' claims.

As one skilled in the art would fully appreciate, the glass powder used in the present invention is different from that used in Bacher because, in the Applicants' invention, the glass is only selected from glasses having a glass transition temperature of 500°C or less.

Further, the compositions disclosed in Bacher are directed to materials for forming dielectric layers, and as one of ordinary skill in the art would know, the dielectric layers are generally fired in the temperature range 800-975°C (see column 4, lines 32-38). The glass powder used by Bacher inherently has a glass transition temperature higher than 500°C, and one skilled in the art would not use the glass powder of Bacher in the claimed invention.

Therefore, Bacher does not disclose or suggest Applicants' claimed composition, and it is respectfully requested that the rejection over Bacher be withdrawn.

Claims 1-4, 9 and 10 are rejected as unpatentable under 35 U.S.C. § 103(a) over Bacher in view of Taga.

As set forth above, Bacher does not disclose or suggest a glass paste comprising a magnesium titanate powder and a glass powder having a glass transition temperature of 500°C or less. Nor is the Bacher composition used for a partition wall and formed on a substance for a plasma display panel.

Taga shows only that a glass composition having a glass transition temperature lower than the softening point thereof. Further, Taga discloses the glass composition having the glass

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transition temperature of 500°C or less as comparative example (see Table 1, Comparative Example 1). Taga therefore teaches away from Applicants' claimed invention. Taga does not suggest Applicants' claimed invention, and one of ordinary skill would not have been motivated to substitute a glass composition such as Bacher with the a glass composition having a glass transition temperature of 500°C or less.

Accordingly, the present invention recited as claims 1-4, 9 and 10 is not obvious over Bacher, even in combination with Taga.

Applicants respectfully submit that the claims are patentable over the cited art for the reasons of record, and as further evidenced by the attached Declaration. Applicants respectfully request that the rejections be reconsidered and withdrawn.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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